Acta Zootaxonomica Sinica, 31 (3): 569– 571 (July, 2006) ISSN 1000-0739
动物分类学报

A NEW GENUS AND A NEW SPECIES OF ARCYPTERIDAE (ORTHOPTERA, ACRIDOIDEA) FROM XINJIANG UIGUR AUTONOMOUS REGION OF CHINA

WANG Yan-Feng[1, 2], ZHENG Zhe-Min[1], NIU Yao[1, 3]

1. *Institute of Zoology, Shaanxi Normal University, Xi'an, Shaanxi* 710062, *China, E-mail: willianm@stu.snnu.edu.cn*
2. *School of Life Sciences, Yan'an University, Yan'an, Shaanxi* 716000, *China*
3. *School of Life Sciences, Henan Normal University, Xinxiang, Henan* 453002, *China*

Abstract In this paper, a new genus and a new species of Arcypteridae (Orthoptera, Acridoidea) is described from Xinjiang Uigur Autonomous Region of China. The new genus is allied to *Kangacris* Yin, 1983 but differs from the latter in: length of fastigial foveolae 2.4-2.5 times in male or 2.0 times in female as long as its width; elytra leaf-shaped, laterally placed and separated narrowly in dorsal view; aperture of tympanal organ crevice-like; bridge-arch of epiphallus straight, anterior margins of lateral plates straight. The type specimens are deposited in the Institute of Zoology, Shaanxi Normal University.

Key words Orthoptera, Acridoidea, Arcypteridae, new genus, new species, China.

1 Kangacrisoides **gen. nov.**

Diagnosis. Body small; head big, shorter than pronotum. Frons oblique in profile, frontal ridge distinct. Antennae filiform. Eyes oval, situated in the middle of head, median ocellus almost equal to lateral ocelli in size. Fastigial foveolae narrow and quadrangular, length about 2.0-2.5 times of its width. Anterior margin of pronotum flat and straight, posterior margin protruded arcuately. Median carina and lateral carinae of pronotum obvious, posterior transverse sulcus crossed the median carina and lateral carinae. Prostenum flat, metasternum lobes separated. Elytra leaf-shaped, laterally placed and separated narrowly in dorsal view. The median area of external side of hind femur with feather-like sculpture, upper basal lobe of hind femur on external side equal to or longer than lower one, apex of lower kneelobes rounded, median keel of upper side smooth, apex rounded, median keel of inner side with stridulatory pegs. Hind tibia without external apical spine. Tympanal organ developed, aperture crevice-like. Subgenital plate of male pyramidal. Bridge-arch of epiphallus straight, lophi thick and short, ancorae distinct, anterior margins of lateral plates straight. Apex of ovipositor hook-like. The new genus is allied to Kangacris Yin, 1983. but can be separated by the characters given in Table 1.

Table 1. A comparison between Kangacrisoides **gen. nov. and** Kangacris **Yin.**

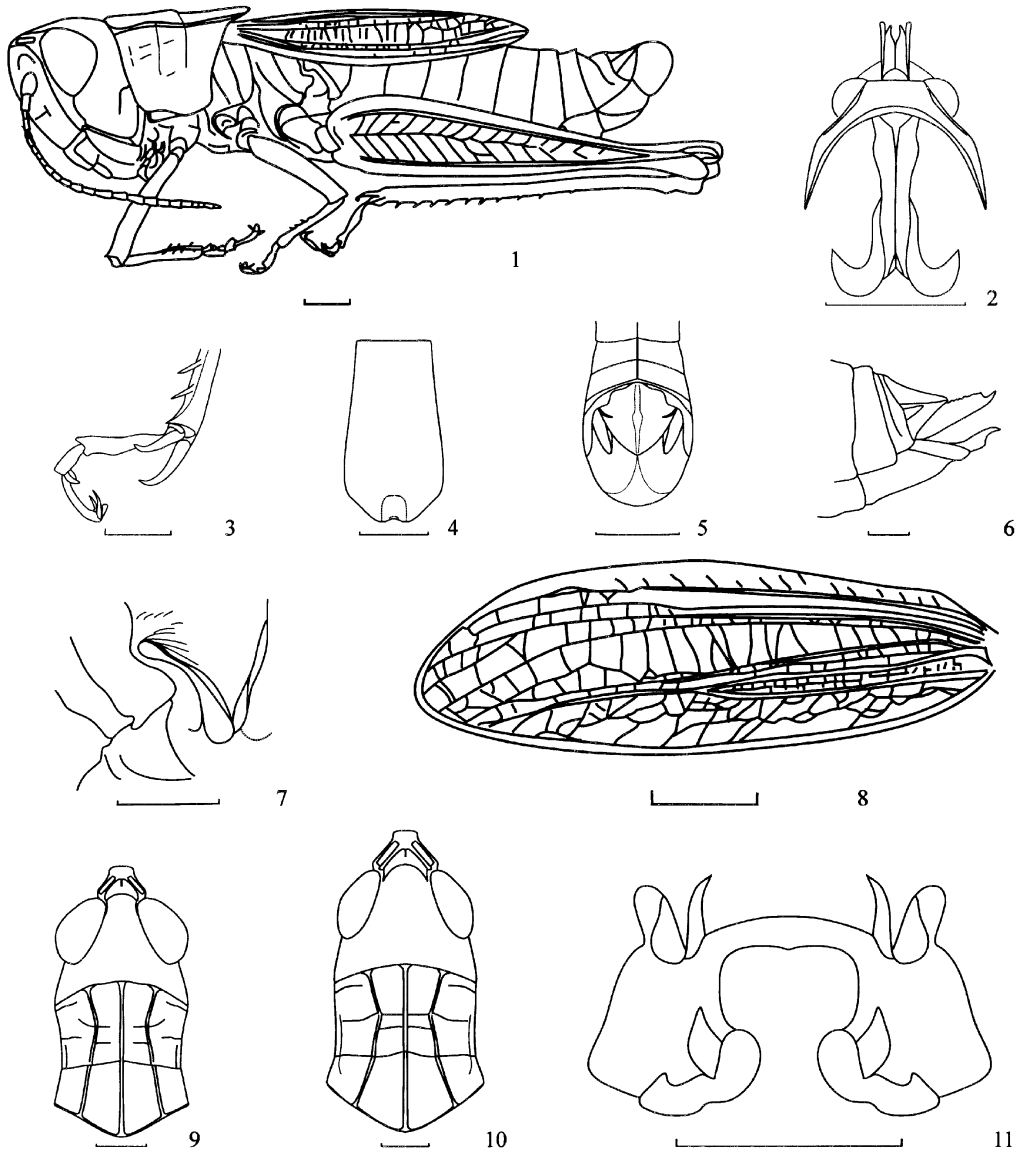
Characters	*Kangacrisoides* gen. nov.	*Kangacris* Yin, 1983
Length of fastigial foveolae	2.4-2.5 times in male or 2.0 times in female as long as its width	3.5 times as long as its width
Elytra	Leaf-shaped, laterally placed and separated narrowly in dorsal view	Scale-shaped, laterally placed and separated widely in dorsal view
Tympanal organ	Aperture crevice-like	Aperture elongated oval
Epiphallus	Bridge-arch straight, anterior margins of lateral plates straight	Bridge-arch arched, anterior margins of lateral plates concaved toward inner side

Type species: *Kangacrisoides huochengensis* sp. nov.

2 Kangacrisoides huochengensis **sp. nov.** (Figs. 1-11)

Male. Body small. Head big, shorter than pronotum. Apex of vertex nearly rectangular. Fastigial foveolae quardrangular, length of fastigial foveolae 2.4-2.5 times as its width. Frons oblique in profile, frontal ridge distinct and flat, slightly concaved at median ocellus, median ocellus almost equal to lateral ocelli in size. Eyes oval, longitudinal diameter about 1.5 times as its horizontal diameter and 1.4-1.7 times

Received 23 July 2005, accepted 8 Mar. 2006.



Figs 1-11. *Kangacrisoides huochengensis* sp. nov. 1. Body ♂, lateral vies. 2. Phallic complex in dorsal view. 3. Apex of hind tibia, lateral view. 4. Subgenital plate of female, ventral view. 5. Apex of abdomen ♂, dorsal view. 6. Apex of female adbome ♀, lateral view. 7. Tympanum ogran. 8. Elytry of male. 9. Head and pronotum of male, dorsal view. 10. Head and pronotum of female, dorsal view. 11. Epiphallus in dorsal view. Scale bars= 1 mm.

as subocular furrow. Antennae filiform, reaching the base of hind femur, 21-22 segments, the length of middle segments about 2 times as its width. Pronotum tectiform, its anterior margin straight, the posterior margin protruded arcuatedly. Median carina of pronotum obvious, lateral carinae slightly arcuately curved in prozona, widest between lateral carinae 1.4-1.5 times as long as the narrowest; anterior transverse and median transverse sulcus obvious in dorsal view, prozona a little longer than metazona; posterior transverse sulcus distinct, crossed the median carina and lateral carinae. Interspace of mesosternal lobes greater than the widest of lateral lobes, the narrowest of interspace of mesosternal lobes 1.7 times as its length; metasterenum lobes separated. Elytra leaf-shaped, laterally placed and separated narrowly in dorsal view, apex extending the posterior margin of fifth abdominal tergum or the middle of sixth tergum; hind wings are very shorter than elytra. Hind femur with 114-117 stridulatory pegs on the inner side; apex of lower kneelobe rounded. Hind tibia? with 11-12 spines on the outer side and 10-12 spines on the? inner side, without outer apical spine, distal lower spur on inner side distinctly longer than upper spur. Arolium between claws developed, extending the middle of apex of claws. Tympanal organ developed, apecture crevice-like. Epiproct triangular, basal part with longitudinal groove in the middle, lateral margins of

basal part with arcuate carinae. Cerci pyramidal, apex sharp and slightly extending to apex of epiproct. Subgenital plate short and pyramidal. Bridge-arch of epiphallus straight, lophi thick and short, ancorae obvious, anterior margins of lateral plates straight. Apex of ovipositor hook-like. Epiphallus and phallic complex as illustrated in Figs. 2, 11.

Body yellowish brown or greenish brown. Pronotum with black longitudinal lines along outer sides of lateral carinae in prozon and inner sides of lateral carinae in metazona. Hind femur yellowish brown, knee black. Hind tibia basally black, rest yellowish brown or yellow. Subgenital plate of male yellow.

Female. Body larger than male. Length of foveolae about 2.0 times as long as its width. Antennae shorter, not reaching the posterior margin of pronotum. Elytra reaching to the posterior margins of third abdominal tergum. Ovipositor short, its tip hook-like, upper outer margins of dorsal valves with finedenticles, lower outer margins of dorsal valves smooth. The posterior margin of subgenital plate slightly concaved in the middle part.

Body dark brown or yellowish brown. The other data of coloration are the same as male.

Length of body: ♂14.1-14.5mm, ♀ 15.5-18.2 mm; length of pronotum: ♂3.0-3.1 mm, ♀ 3.5-3.9 mm; length of elytron: ♂6.0-6.3 mm, ♀ 4.1-4.8 mm; length of hind femur: ♂8.1-8.5 mm, ♀ 10.1-11.0 mm.

Holotype male, Huocheng County (44° 11′ N, 80° 54′ E; alt. 1 400 m), Xinjiang Uigur Autonomous Region; 26 July 2004, coll. by WANG Yan-Feng, YANG Liang and ZHANG Ling. Paratypes: 1 male, 4 females, same data as holotype.

REFERENCES

Bei-Bienko, G. Y. and Mistshenko, L. L. 1951. Acridoidea of the USSR and adjacent countries, (in Russian). Opred. Faune. USSR, 38: 547-585.

Mao, B-Y and Xu, J-S 2004. Descriptions of three new species of grasshoppers and male of *Chorthippus xueshanensis* from China (Orthoptera, Arcypteridae). *Acta Zootaxonomica Sinica*, 29 (3): 468-473.

Yin, X-C 1983. Four new genera and seven new species of grasshoppers from Hengduan Shan range of China. *Zoological Research*, 4 (1): 35-46.

Zheng, Z-M 1985. Acridoidea from Yunnan, Guizhou, Sichuan, Shaanxi and Ningxia Province. Science Press, Beijing. 266-282.

Zheng, Z-M 1993. Acritaxonomy. Shaanxi Normal University Press, Xi'an. 275-294.

Zheng, Z-M and Xia, K-L 1998. Fauna Sinica, Insecta, Vol. 10, Orthoptera: Acridoidea, Oedipodidae and Arcypteridae, Science Press, Beijing. 239-381.

新疆网翅蝗科一新属一新种（直翅目，蝗总科）

王延峰[1,2] 郑哲民[1] 牛 瑶[1,3]

1. 陕西师范大学动物研究所 西安 710062, E-mail: willianm@stu.snnu.edu.cn
2. 延安大学生命科学学院 延安 716000
3. 河南师范大学生命科学学院 新乡 453002

摘 要 记述采自新疆网翅蝗科 1 新属 1 新种，即拟康蝗属 *Kangacrisoides* gen. nov.、霍城拟康蝗 *Kangacrisoides huochengensis* sp. nov.，新属近似于康蝗属 *Kangacris* Yin, 1983，主要区别为：头侧窝长宽之比 ♂2.4~2.5，♀ 2.0；前翅叶片状，侧置，在背部较狭地分开；鼓膜器狭缝状；雄性阳茎基背片桥拱较平直，侧板外缘平直。模式标本保存于陕西师范大学动物研究所标本室。

关键词 直翅目，蝗总科，网翅蝗科，新属，新种，新疆，中国.

中图分类号 Q969.265.1